Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of	)	RE: FCC 88-288
	)	
Advanced Television Systems	)	
and their Impact on the	)	
Existing Television Broadcast	)	
Service	)	
	)	**MM Docket No. 87-268**
Review of Technical and	)	
Operational Requirements:	)	
Part 73-E, Television Broadcast	)	
Stations	)	
	)	
Reevaluation of the UHF Television	)	
Channel and Distance Separation	)	
Requirements of Part 73 of the	)	
Commission's Rules	)	

COMMENTS OF A-VISION™

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A-VISION™, an ATV proponant engaged in the development of advanced television (ATV) and media related systems, hereby submits the following comments relative to the Tenative Decision and Further Notice of Inquiry (Further Notice or FN) in MM Docket No. 87-268 released by the Commission on September 1, 1988.

¶ 5-2   ATV SYSTEMS FOR TERRESTRIAL BROADCAST

A-VISION ™ is developing the A-VISION ™ A1™ Family of Single Channel 6 MhZ Systems. The first A1™ ATV systems are for single channel NTSC compatible terrestrial broadcast. These ATV systems compatibly provide significantly improved audio and video performance with reduction of artifacts and improved resolution, options for current standard aspect ratio and wider aspect ratios, interlaced or progressive scanning, and are both compatible and extensible with A-VISION™ A2™ systems' spectrum -compatible augmentation channels. Funding, however, is very critical.

¶ 5-3   ALLOCATION OPTIONS

Option (a) - Within existing 6 MhZ:
        A-VISION ™ A1™ Single Channel Compatible 6 MhZ Systems
Option (b) - Additional 3MHz for augmentation signal
Option (c) - Additional 6MHz for augmentation signal, or for dual
        non-compatible ATV signal:
        A-VISION ™ A2™ Dual Channel Spectrum Compatible Systems

¶ 5-4   ATV AND NTSC STANDARDS

The opportunity for thorough development, experimentation and testing of ATV including modified NTSC systems should be provided. Therefore carefully relax NTSC standards early to permit early testing of alternatives.

¶ 5-5   SPECTRUM

Early spectrum availability for testing should be accomodated.

¶ 5-6   ADJUSTMENTS

In order to encourage the prompt and efficient introduction of ATV, the possibility of making adjustments should be left open.

¶ 21   COMPATIBILITY AND WORLD-WIDE PRODUCTION STANDARDS

Although present ATV systems and world-wide production standards as now proposed do not yet seem to have the degree of compatibility that would encourage international agreement on a single world-wide HDTV production standard (or heirarchy of extensible standards), the difficult goal is technically possible if its development is properly funded.

From a global perspective, the first goals of globally converging compatible architecture systems (as suggested in the November 17,1987 FCC NOI Comments by A-VISION ™ and in part restated here) are as follows:

A primary goal and requirement of the global system architecture should be the evolutionary compatible convergence of the various significant systems (television, film, computer graphics and related media systems) toward a common globally-compatible but extensible open-architecture integrated system.

The advanced television global system architecture (ATV GSA) system should be compatible with the human visual system, compatible with and extensible to NTSC and other existing and anticipated systems, and be bandwidth efficient, friendly, and cost effective.

The ATV GSA should not only provide the anticipated video/audio performance quality improvements with artifact-free, flicker-free TV display, but also should provide a way to more easily integrate any of the present global systems (both the 525-line NTSC systems and the 625-line systems), as well as more easily accommodate the various frame rates of television, film and computer graphics related industries (including, for example, 24, 25, 30, 50, 59.94, 60, 66, 72 Hz and other frame rates).

A-VISION has been actively developing just such ATV technologies and systems, but critically needs the necessary funding to make them available to the industry.

¶ 119   OPEN ARCHITECTURE AND RECEIVER COSTS

Hopefully the receiver manufacturer can find cost-effective ways to provide sufficient powerful modular interfaces and to consider options such as multi-sync to preclude being obsolete early, and find ways to market these capabilities as advantages and features if appropriate.

¶ 120   TIMING OF ADOPTION OF STANDARDS

Sufficient funding for the development of the powerful new ATV technologies needs to be provided first. Some of the potentially most powerful technologies seem to be coming from some of the least well funded groups. Next sufficient time to develop and test needs to be provided for. After thorough testing of really superior ATV technologies, we would then be in a good position to select and adopt significantly better standards.

¶ 122-1   ATV TRANSMISSION STANDARDS

Working toward a common ATV transmission system standard, both globally and domestically, is desirable. But until there is better support, both financially and politically, for a better common standard, it is still too early to determine exactly what that probably desired standard would be.

¶ 122-4   ATV STANDARDS AND RECOMENDATIONS

Given the extent of ATV development globally, and the global number of systems, a recommendation would be more appropriate, at least until a more globally common system could be developed, tested, and accepted.

¶ 122-5   OPEN ARCHITECTURE

The open architecture should be a way to provide extensibility into the future, and not be an alternative or a substitute for evolving a good system architecture. Hopefully the preferred systems as they evolve both have extensibility for the future as well as potentially allow the presently used global systems to better integrate and converge toward more powerful common systems. Similarly, hopefully the open architecture receiver is not a substitute for the evolving standards setting, but rather a powerful implememtation option with a great deal of future reach.